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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert J. Crowley

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EXAMINER

LAMPRECHT, JOEL

ART UNIT

PAPER NUMBER

3737

MAIL DATE

DELIVERY MODE

08/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/022,965	Applicant(s) CROWLEY, ROBERT J.	
	Examiner JOEL M. LAMPRECHT	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-45 and 47-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-45 and 47-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/18/09 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 39-45, 47-51, and 53-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahadevan-Jansen et al in view of Anidjar et al (ULIAD between Malignant and normal Urothelial Cells and Tissues). Mahadevan-Jansen et al disclose a spectrometer device comprising a distal end with light emitting portion (Col 1 Line 35-55, Col 7 Line 5-454), a light detector (Col 13 Line 25-65), an interventional device (Col 6 Line 22-48), a bandpass filter associated with the light detector (Fig 6, Col 12 Line 20-Col 13 line 27), a light source (Col 5 Line 45 – Col 6 Line 15), a lens (Col 6 Line 5-45), the filter as a property of Raman spectroscopy methods (Col 7 Line 5-65), a substrate for disposing the light emitter and detector (Col 6 Line 15-32), a modulator and mirror

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disposed on the surfaces of the same substrate (Col 12 Line 5-55) for receiving light from the light source (Col 6 Line 65- Col 7 Line 25, Col 7 Line 35-45, Table 1, Figure 5), a substantially transparent window (Col 4 Line 5-30), an optical device including a lens (Col 12 Line 40 - Col 13 Line 20), filter (Col 12 Line 40 – Col 13 Line 2), mirror (Col 12 line 40 – Col 13 Line 2, and a hologram (Col 13 Line 3-20). Mahadevan-Jansen et al also disclose connecting the spectrometer to a power source (Table 1, Col 13 – Col 14), measuring optical properties of light from tissue (Col 7 Line 65 – Col 9 Line 57), specifically for characterizing tissue.

Mahadevan-Jansen et al do not teach the use of a UV light range, rather they stay in the IR spectrum.

Attention is paid to the secondary reference by Anidjar, which teaches the use of a UV-spectrum evaluation of spectroscopy using a multifiber catheter (Page 337, Column 1), filters around the UV range (Page 337, Column 1) and cellular tissues to perform an in vitro study of diagnostic capability of spectroscopy for urothelial tumor diagnosis (Page 335-337). It would have been obvious to one of ordinary skill in the art to have adapted the cellular-level in vitro system of Anidjar et al into the in vivo system of Mahadevan-Jansen et al for the purpose of facilitating real-time early detection of urothelial CIS (Page 339).

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mahadevan-Jansen et al in view of Anidjar et al (ULIAD between Malignant and normal Urothelial Cells and Tissues) as applied to claim 51 above, and in further view of Vari (5,503,559).

Mahadevan-Jansen et al in view of Anidjar et al disclose all that is listed above, but fail to mention the production of the window from polystyrene, polycarbonate, or methyl-methacrylate; rather they teach using a transparent Teflon window for the window material.

Attention is directed to the secondary reference by Vari, which teaches the use of PMMA, polystyrene and other silica-core fibers to allow for the transmission of UV light (Col 10 Line 5-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to have constructed the window out of PMMA or polystyrene instead of Teflon to allow for UV light transmission through the windowed section of the miniature spectrometer disclosed by Mahadevan-Jansen et al in view of Anidjar as Teflon and quartz envelopes also allow UV light transmission.

Response to Arguments

Applicant's arguments filed 5/18/09 have been fully considered but they are not persuasive. Examiner has performed a new search and also assessed both definitions provided by Applicant and the arguments to which those definitions pertain and still finds that the dielectric material which is used to coat or otherwise cover the optical components of the Mahadevan reference indeed would fall under the definition of "substrate" in the field of semiconductor or microelectronic construction as the materials used for this thin layer are dielectric in nature and provide for an electronic process to be performed thereupon. Regarding the argument that has been made regarding the combination of references in light of one teaching in vivo and one in vitro diagnosis, Examiner has previously argued that while the design of Anidjar is used in an in vitro

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method, the methods and teachings of the spectrums of light to be utilized are indeed provided as a motivation and as a reference which teach that these spectrums are very applicable to diagnosis, and therefore one of ordinary skill in the art, being provided with the system and methods of Mahadevan in view of Anidjar would design a system capable of UV only excitation and would have the diagnostic knowledge of the methods of Anidjar at least in the case of facilitating real-time early detection of urothelial CIS (Page 339).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on 8:30-5:00 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/
Supervisory Patent Examiner, Art
Unit 3737

JML